

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Attorney Docket No. 14211US03

In the Application of:

Ronald L. Mahany
U.S. Serial No.: 10/648,747

Filed: October 14, 2003

For: SPREAD SPECTRUM TRANSCEIVER
MODULE UTILIZING MULTIPLE
MODE TRANSMISSION

Examiner: Young Toi Tse

Group Art Unit: 2611

Confirmation No.: 4061

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/Michael T. Cruz/

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REPLY BRIEF
Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This paper is Reply Brief in response to the First Examiner's Answer mailed August 4, 2009 and the Second Examiner's Answer mailed September 1, 2009. The Examiner indicated that the deadline by which to file a Reply Brief is triggered by the First Examiner's Answer. According to the Examiner's indication, the deadline by which to file a Reply Brief is Monday, October 5, 2009, since October 4, 2009 falls on a Sunday.

U.S. Application No. 10/684,747, filed December 9, 2008

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Reply Brief dated October 5, 2009

In Response to the First Examiner's Answer mailed August 4, 2009 and
the Second Examiner's Answer mailed September 1, 2009

REMARKS

This paper is Reply Brief in response to the First Examiner's Answer mailed August 4, 2009 and the Second Examiner's Answer mailed September 1, 2009. The Examiner indicated that the deadline by which to file a Reply Brief is triggered by the First Examiner's Answer. According to the Examiner's indication, the deadline by which to file a Reply Brief is Monday, October 5, 2009, since October 4, 2009 falls on a Sunday.

To highlight herein some of the issues raised by the Examiner in the First Examiner's Answer mailed August 4, 2009 and the Second Examiner's Answer mailed September 1, 2009 and for completeness of response, Appellant respectfully incorporates Appellant's Appeal Brief filed December 18, 2008 and Appellant's Revised Appeal Brief filed April 30, 2009 herein by reference in their entirety.

It is believed that Appellant's Appeal Brief and Revised Appeal Brief already address many of the issues raised by the Examiner in the First Examiner's Answer and the Second Examiner's Answer.

In addition, Appellant would like to highlight the following:

With respect to claims 11-18, it is noted that independent claim 11 recites, in part, "a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation and to receive with the first type of spread spectrum modulation and the second type of spread spectrum modulation."

In the Second Examiner's Answer, it is clear that the Examiner states that Smith teaches mode selection between narrowband modulation and spread spectrum modulation. See Second Examiner's Answer at page 5. To make up for the teaching deficiencies of Smith, the Examiner provides Morrow which allegedly teaches narrowband signaling and wideband signaling. See Second Examiner's Answer at page 5.

However, the Examiner proposes replacing the narrowband modulation in Smith with Morrow's "**narrowband modulation**" which is a direct sequence if 'all ones' code is

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produced, and a frequency hopping if a single frequency is selected.” See Second Examiner's Answer at page 5.

The attention of the Board is respectfully directed to the Examiner's alleged *prima facie* case for obviousness in that the Examiner has merely replaced the **narrowband modulation** of Smith with the **narrowband modulation** of Morrow. As modified, Smith can choose either the **narrowband** modulation of Morrow or the spread spectrum modulation of Smith.

On its face, the Examiner's *prima facie* case for obviousness does not meet the elements of independent claim 11 which recites, in part, “a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation and to receive with the first type of spread spectrum modulation and the second type of spread spectrum modulation.”

Appellant respectfully submits that, *even as alleged by the Examiner*, the combination of Smith and Morrow, as asserted, does not teach each and every element as set forth in independent claim 11.

It is respectfully submitted that, under such conditions, Appellant should have been under no obligation to submit evidence of nonobviousness. See, e.g., M.P.E.P. § 2142 (“The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.”)

For at least the above reasons and the reasons incorporated herein by reference, it is respectfully requested that the Board reverse the obviousness rejections of claims 11-18.

Appellant can only assume that the Examiner believed that applying a direct sequence code always causes the signal to spread. This is not true. For example, if a data signal is multiplied, for example, by a sequence of “ones” (i.e., the “all ones” code), then the result is, for example, the same data signal. There is no spreading of the data signal if same data signal is generated by the “all ones” code. Of course, if the same signal is produced, then there is no spreading of the data signal, thus there is no spread spectrum signaling (i.e.,

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there is no wideband signaling). Instead, as noted by the Examiner's quotation, using the "all ones" code merely produces, as alleged, narrowband signaling.

Perhaps the Examiner believed that single-frequency frequency hopping produced spread spectrum modulation. However, this is not true. If there is only one frequency in the frequency hopping sequence, then there is no frequency "hopping" since the transmitter stays at a single frequency. Of course, if the transmitter stays at a single frequency, then this is not spread spectrum signaling (i.e., there is no wideband signaling). In fact, a transmitter that sends a data signal over a single frequency, as alleged, is merely using narrowband signaling, as alleged. As noted by the Examiner's quotation, using a frequency hopping sequence that is only a single frequency is just narrowband (i.e., single frequency) signaling.

No matter how the Examiner's *prima facie* case of obviousness is viewed, the Examiner is just replacing the **narrowband** modulation in Smith with the **narrowband** signaling of Morrow. Accordingly, as modified, Smith does not teach "a wireless radio transceiver arranged to transmit with a **first type of spread spectrum modulation** and a **second type of spread spectrum modulation** and to receive with the first type of spread spectrum modulation and the second type of spread spectrum modulation" as set forth in independent claim 11.

For at least the above reasons and the reasons incorporated herein by reference, it is respectfully requested that the Board reverse the obviousness rejections of claims 11-18.

In addition, Smith teaches choosing between spread spectrum mode and narrowband modulation. Morrow teaches choosing between narrowband signaling and spread spectrum signaling. So Smith and Morrow both teach choosing between spread spectrum mode/signaling and narrowband mode/signaling. Neither Smith nor Morrow teaches choosing between, for example, first type of spread spectrum mode/signaling and second type of spread spectrum mode/signaling. For at least the above reasons, the combination of Smith and Morrow, as asserted, does not teach or suggest the elements as set forth in independent claim 11.

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In addition, Appellant respectfully notes that Appellant believes that the arguments and rebuttal evidence presented in Appellant's Appeal Brief and Appellant's Revised Appeal Brief, which were incorporated herein by reference in their entirety, presents sufficient bases for reversing the rejections with respect to claims 11-18.

For at least the above reasons and the reasons incorporated herein by reference, it is respectfully requested that the Board reverse the obviousness rejections of claims 11-18.

The same or similar arguments can be made, if appropriate, with respect to independent claim sets 19, 20 and 22-26; 27-34; and 35, 36 and 38-42.

In addition, Appellant respectfully notes that Appellant believes that the arguments and rebuttal evidence presented in Appellant's Appeal Brief and Appellant's Revised Appeal Brief, which were incorporated herein by reference in their entirety, presents sufficient bases for reversing the rejections with respect to claims 19, 20, 22-36 and 38-42.

With respect to claim 41 (and claims 17, 25 and 33), it is alleged that the specification does not describe that the device is a laptop computer. See Second Examiner's Answer at pages 3-4.

Claim 35, from which claim 41 depends, states “[c]ircuitry suitable for use in a portable data processing device”. Claim 41 states “wherein the device is a laptop computer.”

Appellant respectfully draws the attention of the Board to the specification of the present application at page 39, lines 23-24, which state, in part, that “[t]he transceiver module as shown in FIG. 9 may be utilized in a standard desktop or portable computer such as a laptop computer.”

Since the device as a laptop computer is described in the specification, it is respectfully requested that the Board reverse the rejection under 35 U.S.C. § 112, ¶ 1, with respect to claim 41 (and claims 17, 25 and 33).

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In the Second Examiner's Answer at pages 25-26, the Examiner states "Appellant's argument appears provide contradiction statement respect with the arguments regarding claims 17, 18, 25, 26, 33, 34, 41 and 42 in argument (D), which argues that the examiner alleges, without any documentary proof, that 'it is well known to a skilled person in the art to provide a laptop or wireless communication or a desktop computer for wire communication with a communication transceiver or a hand held size as the hand held device 13 to be held in one hand or a user.'" See Second Examiner's Answer at pages 25-26.

The Examiner is mistaken as there is no contradiction. It is apparent that the Examiner is confusing different sections of the Patent Laws and the application of different statutory standards.

With respect to claims 17, 18, 25, 26, 33, 34, 41 and 42, the issue is whether elements are well known or obvious *under 35 U.S.C. § 103(a)* to one of ordinary skill in the art at the time of invention.

With respect to claim 41, the enablement requirement is a requirement *under 35 U.S.C. § 112* which requires "a determination of whether that **disclosure**, when filed, contained **sufficient information** regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention." See, e.g., M.P.E.P. § 2164.01.

Thus, the enablement requirement under 35 U.S.C. § 112 looks to the specification of the present application to determine whether one of ordinary skill in the art can make and use the claimed inventions. On the other hand, the obviousness formulation under 35 U.S.C. § 103(a) does not look to the specification of the present application to determine whether something is well known or obvious to one of ordinary skill in the art.

However, this emphasizes the problem with the Examiner's perspective in determining whether something is well known or obvious in that the Examiner is focusing on a particular claimed element in a vacuum, independent of context and apparently independent of statutory considerations.

35 U.S.C. § 103(a) requires that the Examiner consider obviousness in the context of the claim as a whole and not merely considering a particular claimed element in a vacuum.

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Furthermore, as previously incorporated herein by reference, in esoteric technologies (such as here in the context of spread spectrum technological devices/circuitry), the Examiner is required to support such assertions with a reference work that is recognized as a standard in the pertinent art. See, e.g., M.P.E.P. § 2144.03(A) ("assertions of technical facts in the areas of esoteric technology ... must always be supported by citation to some reference work recognized as standard in the pertinent art.")

For at least the above reasons and the reasons incorporated herein by reference, the rejection of claims 17, 18, 25, 26, 33, 34, 41 and 42 cannot be maintained.

It is respectfully requested that the rejection under 35 U.S.C. § 103(a) be reversed with respect to claims 17, 18, 25, 26, 33, 34, 41 and 42.

For the foregoing reasons, it is believed that claims 11-20, 22-36 and 38-42 are patentable over the alleged prior art of record. Reversal of the Examiner's rejection of claims 11-20, 22-36 and 38-42 is therefore respectfully requested, thereby placing claims 11-20, 22-36 and 38-42 in condition for allowance. Accordingly, issuance of a patent on the application is therefore respectfully requested.

The Commissioner is hereby authorized to charge any additional fees, to charge any fee deficiencies or to credit any overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

Dated: October 5, 2009

Respectfully submitted,

/Michael T. Cruz/

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